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A COMMUNICATION FROM THE MONROE INSTITUTE OF APPLIED SCIENCES

THE HEMI-SYNC PROCESS

Perhaps the most significant mind-brain research in recent years has been in the hemispheric specialization. The consensus of several hundred pages and studies generally supports the postulates of dominant left brain functions (lineal, verbal, analytic) and those of the right brain (visual, spacial, synthesis). All concede the fact that our educational system and the fundamental values of our culture nurture heavily such left brain dominance.

Synchronous or simultaneous brain wave patterns in both hemispheres (HEMI-SYNC) apparently occurs infrequently in typical human consciousness, and then for a few seconds at the most. Usually, activity shifts from left to right hemisphere as the dominant area almost in a flickering movement according to the mental task at the moment.

By definition, hemispheric synchronization or coherence is a state of consciousness indicated by EEG forms in both hemispheres which are simultaneously equal in amplitude and frequency. Due to the rare occurrence and short duration of such consciousness, there has been little supportive instrumental measurement until recently. The best early study was conducted by Elmer and Alyce Green at the Menninger Clinic, where a subject with twenty years in Zen meditative training was tested extensively. Results showed that the subject could establish at will a hemi-sync state, consistently and over fifteen minutes in length.

Through the use of audio stimulæ to evoke an electrical frequency-following response in the brain (FFR), as developed by the Institute, and with the application of such signals in a beat-frequency mode (different signals in each ear), research by the Institute has determined workable methods and techniques that induce hemispheric synchronization coherence in the human brain. This has been verified and replicated consistently both at the Institute and other facilities.

Thus for the first time, consciousness as represented and/or created by the HEMI-SYNC state can be instigated, identified, and measured.

The full scope of HEMI-SYNC consciousness is yet to be determined. Very little is known of its characteristics, value or utility other than the preliminary work performed by the Institute. There is a growing belief that meditation, moments of crisis, certain mental disciplines, intense concentration, peak experiences, all represent varieties of such consciousness. Conversely,

hypnosis, drug-induced states, illness, anaesthesia, and like conditions do not. Subsequent research may substantiate such belief, now that investigative tools are available.

The Institute has reached the following conclusions in relation to the propagation and delineation of HEMI-SYNC consciousness, based upon both anecdotal and bio-monitoring consensus from 4,823 experiments among 1,280 volunteer participants over a five year period.

- 1) The characteristics of such consciousness may be varied directly in accordance with the signal or signals introduced.
- 2) The re-introduction of such signal patterns evoke a replication of the original characteristics.
- 3) Specific states of HEMI-SYNC consciousness can be learned and re-established without the original stimulus much as the biofeedback process.
- 4) HEMI-SYNC audio stimulus is not all-pervasive. It can be rejected easily either subjectively or objectively.
- 5) No significant or lasting contra-indicative effects have been reported among the participants in the experimental series.
- 6) Based upon the application of specific single and multiple audio patterns, the following characteristics of HEMI-SYNC consciousness have been noted:
 - a) Deep mental and physical relaxation.
 - b) Sense of euphoria, extending beyond stimulus.
 - c) Single-pointed focus of attention.
 - d) Increased utilization of memory patterns, at all levels.
 - e) Higher suggestibility, but with greater acceptance or rejection.
 - f) Holistic problem solving and decision-making.
 - g) Changes in overview, less restrictive, significantly broader in scope.
 - h) Major increase in creativity, ideas, with attendant application .
 - i) Measurable changes in muscular co-ordination.
 - j) Permanent memory addition, by rote and self-synthesized experience.

The Institute is continuing to operate experimental programs in the evaluation of effects produced by other audio patterns yet to be investigated. Formal papers of such effort will be presented to appropriate groups at a future date.